(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 22 January 2004 (22.01.2004)

PCT

(10) International Publication Number WO 2004/007497 A1

(51) International Patent Classification⁷: C07D 473/32 // C07C 31:28, C01G 15/00

(21) International Application Number:

PCT/KR2003/001396

- (22) International Filing Date: 15 July 2003 (15.07.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

- (30) Priority Data: 10-2002-0041267 15 July 2002 (15.07.2002) KR
- (71) Applicant (for all designated States except US): KYUNGDONG PHARM. CO., LTD. [KR/KR]; 535-3, Daeyang-ri, Yanggam-myun, Whaseong-si, Kyunggi-do 445-931 (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): LEE, Byoung-Suk [KR/KR]; 1-1106, Imgwang Apt., 1015 Bangbae3-dong, Seocho-gu, Seoul 137-755 (KR). SHIN, Sang-Hoon [KR/KR]; 308-402 Jugong APT., Byeolyang-dong, Gwacheon-si, Kyeonggi-do 427-040 (KR).

- (74) Agents: LEE, Ju-Ki et al.; 3rd Floor, Ducksung Bldg, 636-16 Yeoksam-dong, Kangnam-ku, Seoul 135-908 (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR PREPARING 9-[4-ACETOXY-3-(ACETOXYMETHYL)BUT-1-YL]-2-AMINOPURINE

(57) Abstract: Disclosed is a process for preparing 9-[4-acetoxy-3-(acetoxymethyl)but-1-yl]-2-aminopurine (called Famciclovir), a drug of purine derivatives having antiviral activity. This process comprises reacting 2-aminopurine with 2-acetoxymethyl-4-bromobut-1-yl-acetate in the presence of thallium (I) ethoxide to give the desired compound. According to this process, the desired compound can be prepared in very high selectivity and purity under mild reaction conditions.